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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/781,023 | 02/09/2001 | Neil H. Riordan | RIORD.006A | 1580 |
| 20995 | 7590 05/20/2003 | | | |
| KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR | | | EXAMINER | |
| | | | YU, MISOOK | |
| IRVINE, CA | 92014 ART UNIT PAP | | PAPER NUMBER | |
| | | | 1642 | 1 7 |
| | | | DATE MAILED: 05/20/2003 | V |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Applicati n N . | Applicant(s) | | | |
|---|--|---|--|--|--|--|
| · | | 09/781,023 | RIORDAN, NEIL H. | | | |
| Offic | Action Summary | Examin r | Art Unit | | | |
| | | MISOOK YU, Ph.D. | 1642 | | | |
| The MA Period f r R ply | ILING DATE of this communication appo | ears on the c ver sheet with the c | rrespondence address | | | |
| THE MAILING - Extensions of time after SIX (6) MON - If the period for re - If NO period for re - Failure to reply wit - Any reply received | D STATUTORY PERIOD FOR REPLY DATE OF THIS COMMUNICATION. a may be available under the provisions of 37 CFR 1.13 THS from the mailing date of this communication. ply specified above is less than thirty (30) days, a reply ply is specified above, the maximum statutory period within the set or extended period for reply will, by statute, to by the Office later than three months after the mailing in adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| 1)⊠ Respon | Responsive to communication(s) filed on <u>25 February 2003</u> . | | | | | |
| 2a)⊠ This ac | This action is FINAL . 2b) This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claim(s) | | annlication | | | | |
| | Claim(s) <u>1-35 and 70-79</u> is/are pending in the application. 4a) Of the above claim(s) <u>35</u> is/are withdrawn from consideration. | | | | | |
| | Claim(s) is/are allowed. | | | | | |
| | • • • | | | | | |
| <u> </u> | Claim(s) <u>1-34, and 70-79</u> is/are rejected. | | | | | |
| | 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)∐ The spec | ification is objected to by the Examiner | | • | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11)☐ The propo | osed drawing correction filed on | is: a) ☐ approved b) ☐ disappro | oved by the Examiner. | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Pri rity under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3: Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowled | dgment is made of a claim for domestic | priority under 35 U.S.C. § 119(| e) (to a provisional application). | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | • | | | |
| 2) Notice of Draftsp | nces Cited (PTO-892) person's Patent Drawing Review (PTO-948) losure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | |
| S. Patent and Trademark Office |) | | | | | |

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DETAILED ACTION

Receipt of the Amendment filed on 2-25-2003 is acknowledged.

Election/Restrictions

Claim 35 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b). Claims 1-35 and 70-79 are pending. Claims 1-34, and 70-79 are examined on merits.

Specification

The objection of the amendment under 35 U.S.C. 132 is **withdrawn** in view of amendment.

Claim Rejections - 35 USC § 112

Rejection of claims 1-34, 70-79 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention **is withdrawn** because upon reconsideration the issues raised here are more or less issues of enablement rather than the boundary of one's property.

Claims 70-79 **remain rejected** for reason of record under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had **possession** of the claimed invention. Applicant argues that many other antigen presenting cells are well known in the art but this argument is not persuasive because the argument is not commensurate with the scope of the claims. Although other antigen presenting cells are known in the art, the art does not teach any antigen presenting cells when co-cultured with urine isolate and then given to patients along with urine isolate can treat cancer or cachexia patients.

Claims 1-19 and 70-79 **remain rejected** for reason of record under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to **enable** one skilled in the art to which it pertains, or with

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which it is most nearly connected, to make and/or use the invention. Applicant's arguments and other responses have been fully considered but found unpersuasive because the specification lacks adequate disclosure to enable one skilled in the art to make/use the claimed invention without resorting to undue experimentation. Applicant has not argued the Office's conclusion "One cannot extrapolate the teachings of the specification to the claimed invention because the specification does not teach method of cancer treatment using the methods of claims 1-19 and 70-79." See page 5 of the previous Office action.

The anecdotes were mentioned in the previous Office action for two main reasons: to direct applicant's attention that the method of claims 70-79 and the method of the anecdotes are different methods, and also to make a point that even if the instant claims 70-79 were drawn to the method used in the examples, the specification does not provides adequate disclosure to enable one skilled in the art to make/use the claimed invention without resorting to undue experimentation. First, since the anecdotes do not provide any control at all for such claim as cancer treatment, it is not clear whether anecdotes presented as evidence in the instant specification is due to miracle as reported to be happened before according to Eldo (1997) or any other causes such as chemotherapy and other conventional cancer treatment the patients might have had received other than the treatment, or result of the treatment. Second, the specification does not provide enough guidance about how the product(s) are prepared and what is the dose range for the products in order to be effective in treating cancer or cachexia. Compare the cancer vaccination guidance provided by Greiger et al (published in 2001, the same year the instant application was filed) at the Material and Methods section and Table 1 to the guidance in the instant specification. It is well known in the art that cancer treatment is unpredictable.

Applicant argues that the specification gives several examples of cancer status being improved. The examples in the specification have been considered. However, the examples used a different treatment method from the method of these claims. The claimed method involves administering urine isolate, alone or in combination with antigen-presenting cells (APCs). The examples in the specification administered urine-

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treated APCs; the APCs were cocultured with urine isolate and washed, thereby removing the urine isolate before the cells were administered. Therefore the examples in the specification involve a different treatment. In addition, it is noted that the working examples do not teach details such as the amount of APCs administered to each patient in the treatment. For these reasons the working examples do not provide guidance for the invention being examined in this application.

Applicant argues that the enablement rejection is a proxy for a utility rejection, and argues that the invention meets the requirements for utility. Both utility and enablement do involve the issue of the application's disclosure of how to use the invention. But arguing that the invention meets the requirements of utility does not resolve the issue of whether undue experimentation would be require to practice the disclosed use. In the cancer treatment art, those skilled in the art generally demonstrate a skeptical response to anecdotal reports of success in uncontrolled studies with small numbers of patients, see as evidence the reviews by Herbert (1986, Cancer; 58, 8 Suppl, pages 1930-41, abstract only) and by Green (1982, Controlled Clinical Trials; 3. pages 189-98, abstract only). These references are not cited to suggest that the examiner thinks the claimed invention is somehow fraudulent, but to show that those skilled in the art would still question the efficacy of a treatment even after viewing evidence similar to the results presented in the specification. Considering the limited guidance in the specification, the state of the art, the unpredictability of effective cancer treatment, the documented skepticism of those in the art regarding the type of evidence provided in the specification, and the absence of working examples for the invention claimed, it is maintained that undue experimentation would be required to practice the invention as claimed.

Claims 20-34 remain rejected for reason of record under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to **enable** one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant argues that the specification at page 5 line 28 to page 28 says urine contains cachexia-inducing

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molecules and Example 1 provides an example. However, this argument is not persuasive because the method used in Example 1 is different than the method claimed. Instant claims 20-34 uses urine isolate and Examples 1 uses something else.

Since the previously cited review article indicates that cachexia is multi-faceted, complex problem that cannot be treated with imunogen alone, and the contradictory teachings of Cariuk et al, i.e. cancer antigen found in urine causes cachexia instead of helping to gain weight, and the specification provides insufficient guidance and provides no working examples (other than notoriously difficult to follow anecdote using a different method than the method of claims 20-34) or any other evidence which would provide guidance to one skilled in the art, it is maintained that one in skilled in the art would have reason to question the efficacy of the claimed method in treatment of cachexia with a reasonable expectation of success.

Claim Rejections - 35 USC § 103

All of the rejection under 35 U.S.C. 103(a) are withdrawn because upon reconsidering it is determined that one in the art would not be motivated to develop cancer treatment requiring huge amount of resources based on the medical hypothesis, not a scientific data of Eldo alone.

Conclusion

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 703-308-2454. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony C Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Misook Yu May 19, 2003

MARY E MOSHER PRIMARY EXAMINER GROUP 1800